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CAPACITOR WITH PLASMA DEPOSITED DIELECTRIC

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Abstract of the Disclosure

A capacitor is formed utilizing a plasma deposited capacitor dielectric wherein the
plasma deposition is a two-component reaction comprising a silicon donor, which is
15 non-carbon containing and non-oxygenated, and an organic precursor, which is non-silicon
containing and non-oxygenated. The plasma deposition produces a capacitor dielectric that
can exhibit a low dielectric constant and, in selected depositions, a response to
photo-oxidation induced by exposure to radiated electromagnetic energy in the presence of
oxygen. Photo-oxidation of selected depositions can be used to alter the dielectric constant
20 of the capacitor dielectric after the capacitor has been fabricated. The capacitor may be used
in precision filter applications.